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and The Medical News.*A Weekly Review of Medicine.*

EDITORS

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BLINDNESS AND THE MIDWIFE.

In thirteen States of the Union there are absolutely no restrictions upon practice by midwives; in fourteen more it has not been possible to ascertain any statutory requirement for their training, licensure, or control; in two only does legislation approach what is right and proper. The Committee for the Prevention of Blindness sent their secretary, Miss Carolyn C. Van Blarcom, to Europe to ascertain what had been accomplished there, and we have before us part of her experiences recorded in the 141 pages of *The Midwife in England*, with an introduction by Dr. J. Clifton Edgar, published at 130 East Twenty-second Street, New York. The present condition in America seems to the author to be summarized by a beldame, eighty years of age, who declared, "I am too old to clean; too weak to wash; too blind to sew; but, thank God! I can still put my neighbor to bed!" Such a woman will assure her patients that sore eyes are natural in a baby, will prescribe milk, lemon juice, lard, raw potatoes, scraped beef, saliva, etc., and when the baby goes blind, piously declare that it is the will of God. Owing to the character of recent immigration, over forty per cent. of women in America are now attended in childbirth by midwives, yet there is but one training school in the whole country, that at Bellevue Hospital.

The present requirements in England are briefly as follows: A candidate must, under satisfactory supervision, have attended and watched the progress

of not fewer than twenty labors, she must have nursed twenty lying-in women and their infants during the ten days following labor, and she must have attended a course of instruction, extending over not less than three months and consisting of not fewer than fifteen lectures, in elementary anatomy, pregnancy and its complications, including abortion, signs of abnormal labor, hemorrhage, preparation of antiseptics, management of the patient, including use of thermometer and catheter and taking of the pulse, management of the infant for ten days, including feeding and signs of disease, duties of a midwife as described in the regulations—to observe which demands intelligence and care—obstetric emergencies, puerperal fever, effects of venereal disease on the newborn, disinfection of person, clothing, and apparatus, principles of hygiene as regards home, food supply, and person, and the care of children apparently lifeless. Many graduate nurses add the midwife's training to their own in order to qualify for certain posts. Three of the forty English schools give free tuition, and in a few instances the cost runs up to \$145. The examination is strict, both written and oral, defects in training being frequently discovered by one test when the other has been passed satisfactorily.

Owing to our constitution this matter must be taken up by the States separately, and it is complicated by such problems as the immense number of foreigners with their own customs and superstitions, the division into white and black, the very size of our country indeed. It demands immediate and sustained attention, for fitness or unfitness in a midwife may mean life or death, sight or blindness, health or invalidism, physical well being or lifelong misery for untold numbers of mothers and children. There could not be better work for committees of women than to urge the necessary steps on the various legislatures, and we commend this booklet most earnestly to the attention of such committees, for it contains important details to which our limited space has prevented more than the barest reference. If object lessons are needed, a few visits to asylums for the blind should serve to fire the average intelligent woman with an unquenchable enthusiasm for so necessary and so appealing a crusade.

EXPERIMENTAL IMPLANTATION OF THE
GENERATIVE GLANDS.

An interesting experiment which, it is hoped, may ultimately prove as successful as its benefits would prove far reaching, was recently begun by G. Frank Lydston (*Bulletin of the Chicago Medical Society*, March 7, 1914) to elucidate the following questions: The therapeutic value of generative gland implantation, the kind of dead subjects most suitable as donors, and the value for implantation

work of frozen glands, Carrel's labors being duly recognized. As to the disorders which would probably be benefited by the procedure, they would include dementia præcox, impotence and sterility, psychopathia sexualis, certain chronic diseases of the skin, the disturbances incident upon artificial or physiological menopause, sex mutilations, and precocious senility.

The organs employed were a testis taken from a suicide eighteen years of age who had been dead seventeen hours, and the ovaries of a girl who had died of violence twelve hours earlier. The testis was implanted into the experimenter's own spermatic cord within the scrotal sac, his associate Dr. Carl Michel, assisting. On the eighth day after the operation one half of the implanted gland was removed; it was found to have become fixed by distinct and firm vascular adhesions. A fistula, which formed where the segment of gland had been removed, permitted the passage of a mucosaneous secretion in which immature spermatozoa were found. The ovarian implantation was carried out in a woman fifty-nine years of age who was suffering from the effects of total removal of the uterine appendages. One of the ovaries was implanted in the patient's left labium majus. While the wound healed kindly, it is as yet too early in this, as in the first case, to predict results.

While expressing the hope that the experiment may prove successful, we cannot but recall the results recorded by Carrel and Guthrie in respect mainly to kidney implantation in the cat. Though the animal recovers and even secretes urine normal in amount and composition, the exogenous nature of the grafted organ soon asserts itself through its inability to carry on the function, and the animal dies in about three weeks. Transplantation of an animal's own kidneys, however, enables it to live two years in normal health. This and other experiments have shown that transplantation of an exogenous organ, even from a healthy donor, cannot be performed successfully, at least in the light of present knowledge and with available technic. Such experiments as Doctor Lydston's are invaluable, however, in that they may, even if it be by chance, as is often the case in science, furnish some clue undiscovered by his predecessors which will ultimately insure success.

TEETH AND HEALTH.

In a recent number of the *American Journal of the Medical Sciences*, Camac called attention to the importance of a more intimate cooperation between the physician and the dentist. There is little doubt that for many years the medical profession has assumed a somewhat superior position and has re-

fused to recognize the bearing that dental disturbances have upon the general health.

Any one who takes the trouble to examine, even casually, the oral cavities of his patients will be astonished at the condition of the teeth. Although American soldiers have excited favorable comment on account of the tooth brush being so much in evidence, yet the care of the mouth is neglected sadly by the community. So many teeth are gone that the proper mastication of food becomes impossible, and the individual is commonly under weight and anemic. In addition to this loss of mechanical value, there is the presence of the necrotic conditions that led to the destruction of the teeth. It may be called Riggs's disease, pyorrhœa alveolaris, dental abscess, dental sepsis, etc., but the important point in common is the presence of pus in greater or less amount. If, as is not infrequent, two or three drams of pus, containing virulent streptococci, are secreted and swallowed every day, there must occur some disturbance of digestion. But there is an even more serious and dangerous possibility, that of localized collections of pus which cannot escape and may therefore give rise to systemic infections, such as arthritis and endocarditis. Such a purulent condition anywhere else than around the teeth would be attacked most vigorously. No physician would permit an infected finger nail to go untreated, yet the same man will calmly disregard a suppurating tooth and wonder why his treatment is not successful. Camac believes that consultations of the internist with the dentist are as necessary as those with the surgeon. A belief that is indeed warranted by the facts.

THE DIVIDING LINE BETWEEN SANITY AND INSANITY.

It is not our purpose to enter into a discussion of the best definition of sanity or insanity. Although we all know what sanity and insanity mean, it is not an easy matter to give a definition which is sufficiently all embracing and yet properly delimiting in its scope, and which will please us all. We find the same difficulty in defining such everyday and well understood terms as life and love. In fact, the fundamental, elemental things in life seem at times quite indefinable. So it has always been with the terms sanity and insanity. The real difference between sanity and insanity is, essentially and fundamentally, one of degree and not of kind; it is a relative and not an absolute difference. Between the two extremes of positively sane on the one hand and positively insane on the other, we find an uninterrupted series of intermediate mental states, which merge by an imperceptible series of gradations from sane into insane. We have, therefore,

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Original Communications.

MODERN TECHNIC IN URETHRAL STRICTURE.

BY CHARLES H. CHETWOOD, M. D.,
New York.

Stricture of the urethra is a classical subject, embracing an extensive field. I will attempt to call attention only to some of its important phases in an effort to elicit discussion along lines of special interest, and to bring forward some points that have particularly impressed me from personal observation. With this end in view, the following subdivisions of the subject will be briefly touched upon: 1. Etiology; 2, diagnosis; 3, nonoperative treatment; and, 4, operative measures.

ETIOLOGY.

Stricture is congenital or acquired, or both. A congenital narrowing may of itself be insignificant, but may act in the presence of acute inflammation as a predisposing factor to the acquired form of this malady. Acquired stricture may be gonorrheal or traumatic, or both, and denotes a cicatricial narrowing, due to the submucous formation of fibrous tissue. We recognize some strictures as soft and elastic, others as hard and unyielding. Some cover a very small area, while others involve an extensive deposit of nodular tissue around the urethral lumen. Why is this? it may be asked.

That is a question worthy of discussion. Why is it that one individual suffers from prolonged, chronic inflammation, and then, after the expiration of many years, a narrowing of the canal develops that involves a limited area only, while another, in a much shorter period, presents an extensive deposit of fibrous tissue that may be felt as an indurated mass by palpating the portion of the canal in which it is situated? Why is it that one stricture may be dilated readily, from a very tight opening to almost the normal size of the canal, causing but a small amount of bleeding, whereas another stricture will yield but slightly to an attempt at dilatation, and then only at the expense of laceration and free bleeding? Why is it, again, that one stricture, upon being dilated, will seem to retain the advantage gained for a long period, while in other cases it is almost impossible to maintain a satisfactory calibre for functional purposes, except by almost constant passage of instruments?

When we consider that today stricture is much less prevalent than formerly, we arrive at an explanation of the common causes in the production of this lesion. Gonorrhea is recognized as the primary

factor in most cases, but all cases of gonorrhea do not lead to stricture. In the past, when this inflammation was treated with excessively strong and irritating injections, when the virulent bacterial factor was not understood, injury of the delicate mucosa, and consequent infection and extension into the submucous region, involving the muscularis and follicular glands, were of common occurrence. If this injury happens to be slight, the effect is likewise slight; if the injury is extensive, the area involved becomes all the greater; and if the virulence of the microbial cause has abated to a considerable degree before the injury is inflicted, the resulting irritation is not great, whereas, when the virulence is at its height extensive infection of the anatomical structures is more likely to ensue.

A brief outline of the morbid changes furnishes an explanation of the chief types of stricture formation. The sequence is, first, inflammation, then cicatricial or scar formation; first, round cell infiltration in the submucous tissue, then more or less extensive cellular proliferation. If the rent in the mucosa is slight, only a small area may be involved, but if the damage is of greater degree, possibly allowing the tissues to be inundated with decomposing urine, then, as a consequence of the pent up septic condition, in an attempt perhaps on the part of the bloodvessels to wall off the infected area, it is not difficult to understand that an extensive indurated focus develops, which focus eventually becomes a hard unyielding mass of fibrous tissue.

DIAGNOSIS.

In the discussion of diagnosis, we will refer more particularly to instrumental examination, as it is by this means that stricture is detected. About sixty per cent. of the cases may be said to be between the bulbomembranous urethra and the penoscrotal angle. The remaining cases are about equally distributed throughout the other parts of the anterior canal. Stricture of the prostatic urethra anterior to the vesical orifice is of rare occurrence as a result of gonorrheal inflammation, but cicatricial contracture of the neck of the bladder is a common sequence of gonorrhea of the deep urethra or of the interior of the bladder, a condition which should be recognized and appreciated.

In exploring the urethra, we must keep in mind the well known existence of points of anatomical narrowing, and in detecting the presence of stricture of so called wide calibre, not overlook the diminished distensibility at these points. Such are the point of narrowing at the meatus, followed by a definite widening, two or three inches beyond the meatus a point of diminished distensibility, and another point of anatomical narrowing at the bulbo-

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operation *par excellence*. It was the easiest and simplest method of treatment, gave less discomfort to the patient, and was the one most certain to result in cure; whereas by dilatation only, they might have to pass sounds forever. Otis was right. He cured his cases, and the hemorrhages and occasional deaths that occurred were accidents entirely separable from his proposition. The Otis urethrotome was simply an infinity of sizes of urethrotomes in one instrument. It had the merit of holding the stricture still while the knife operated. Otis tried to make a urethrotome which would detect the stricture, and some old illustrations showed how he tried to put a finder or detector on it; but it had to be an extremely fine mechanism and his instruments were not fine enough.

Doctor FULLER said that the beautiful instruments presented by Doctor Fluhrer showed what could be done by careful manipulation of the urethra, and that one should not absolutely condemn internal urethrotomy. There was one interesting point in the extreme cases referred to by Doctor Fluhrer where such excellent results were obtained, namely, perineal drainage. It was a question, in some of these very bad cases, whether the drainage had not accomplished more than the cutting. Many years ago, Moulin, of London, took a number of bad cases of penile stricture, and without any instrumentation, opened the perineum, drained for two weeks or more, and then allowed the opening to close. At the end of a month, he examined the cases, and in a large number he could find no anterior stricture at all; in all the other cases, the stricture had subsided to a very marked degree. It was a question, therefore, whether this was not a very valuable adjunct in many of these cases Doctor Fluhrer had reported as internal urethrotomy. It would seem that where the perineum was drained in that way (by buttonholing the perineum), that the operation should really be classed as an external, instead of an internal urethrotomy. About the time he started practice in New York, they had just passed through the craze for the Otis internal urethrotomy, and in consequence, a great many bad results were in evidence, which led to a prejudice against the procedure to a greater extent than perhaps was warranted. He himself had always felt a great deal of hesitation in cutting a stricture of the deep urethra internally, and had been mindful that even though careful in so doing, bad results might ensue. In most instances, therefore, he preferred to open the perineum and drain, and then cut the penile urethra, with, as it were, a feeling of impunity.

In regard to the external urethrotomy which Doctor Swinburne said he used to condemn, if one employed the technic which he and others now used, one might obtain extremely good results, in fact, bad results were very much in the way of exceptions. Doctor Ware had spoken of a condition to which he, himself, had directed attention a good many years ago. These were the bad cases where perineal fistulae and urinary infiltration were present. No one could procure a good result by the primary performance in these cases of either internal or external urethrotomy. Everything was disorganized, and it was in such cases that he had

advised as an initial procedure a suprapubic operation, thereby diverting for a month or so, the flow of urine from the perineum, after which plastic repair would afford excellent results.

Doctor MICHEL stated that in the past seven years in his service he had been able successfully to dilate all the strictures coming under his observation, and that the worst cases encountered were those which had been severely handled with instruments or cut. He had seen some cases treated by Doctor Swinburne and Doctor Warren, in which by means of resection good results had been obtained.

Doctor SINCLAIR presented an ingenious instrument which he called a retrourethral cystoscopic guide, a communication concerning which will be found on page 677.

Letters to the Editors.

FURTHER EXPERIMENTATION WITH IMPLANTATION OF SEX GLANDS TAKEN FROM THE DEAD BODY.

CHICAGO, March 23, 1914.

To the Editors:

Referring to the matter presented in the editorial article in the NEW YORK MEDICAL JOURNAL, issue for March 21, 1914, I take the liberty of stating that my experimental work, since demonstrating in two apparently successful cases the feasibility and apparent safety of the method, comprises fifteen implantations in the human subject, in both sexes, making in all seventeen. The series of cases comprised epileptics, paretics, senile dementes, and subjects with dementia præcox. The results of the implantation *per se* will later be submitted to the profession, and the end results as soon as sufficient time has elapsed to determine them. The first two of the series were doing well at the end of two weeks.

There were four cases of cross transplantation, one ovary in a male, and three testes in women, and one implantation with anastomosis of the vas. All the cases operated in were of long standing and not at all the sort of material to give the method a fair therapeutic test. On the fifth day after operation six apparently were doing well. A small stitch abscess appeared in one case (male), with a temperature of 103° F. On freeing the pus the temperature fell to normal. In this case the implantation was intrapelvic, in the preperitoneal space. In another (female) a small superficial abscess formed at the end of a week, with an elevation of temperature of two degrees. The abscess was opened and drained and is rapidly healing. The ovary still is *in situ*. In none of the other cases has there been thus far a rise of temperature over 1.5° F. Seven of the cases are too recent for special comment; in all there appeared at the end of twenty-four hours, considerable induration about the implanted gland, as a natural sequence of trauma from the tissue "insult," and what must of necessity be, until circulation is established in the gland, a foreign body.

In regard to Carrel and Guthrie's transplantation experiments upon the kidneys of the cat, I would remark that the generative gland secretion, unlike the renal secretion, may be suppressed without danger to life. In implantations it is a matter of indifference to the end results, whether or not, the generative secretion escapes from the gland. Sterilization has proved this, time out of mind. It is a far cry from the physiology—especially the internal secretion physiology—of the cat to that of the gonad of the human being. Strictly speaking, the testis and ovary have no eliminative function. The discharge of spermatozoa and ovules is not essential to the life of the "producer," but to procreation only.

Theory aside, a good sized piece of implanted testis has been present since January 16th in my own person, and apparently has been, and still is, functioning so far as internal secretion is concerned, as the physiologic results have shown. How long it will persist, would be difficult

to say. The gland was decorticated, and complete atrophy would not be astonishing. The physiologic effects of my two first implantations will be later presented to the profession.
G. FRANK LYDSTON, M. D.

CREDITABLE STATISTICS FROM THE BRONX.

NEW YORK, March 25, 1914.

To the Editors:

It is a remarkable fact and one I believe not generally known, that the Borough of the Bronx which, with its population of 584,000, is virtually a city in itself, has an infant mortality rate lower than that of any city in the United States and probably lower than any city in the world. At my request, Dr. William Guilfooy, of the Department of Health, has kindly furnished me with the following figures for the year 1913:

Number of births in the Bronx, 14,679. Number of deaths under one year in the Bronx, 1,166. Of these deaths 410 were due to congenital debility, 246 to respiratory diseases, and 230 to diarrheal diseases.

The following table shows the number and rates in the entire city of New York and in the Borough of the Bronx:

	Births.	Deaths under 1 year.	Rate per 1,000.	Congenital debility.	Rate per 1,000.	Respir. diseases.	Rate per 1,000.	Diarrh. diseases.	Rate per 1,000.
New York city	135,134	13,722	101.9	4,463	33.2	3,153	23.3	3,027	22.4
Bronx	14,679	1,166	79.5	410	27.9	246	16.7	230	15.6

The Borough of the Bronx has an infant mortality rate of 79.5 per 1,000, by far the lowest in the United States. The city of St. Louis is credited with 99.6; London, in 1912, had ninety-five per mille. Of the European countries, Norway has always had the lowest rate. The latest figures which I have at hand are 81 per 1,000 in the year 1905. I believe that the exceedingly low rate in the Bronx is due to the large proportion of mothers who nurse their infants. During the last five years, in the maternity ward of the Lebanon Hospital, ninety-eight per cent. of all mothers have nursed their babies during the first two weeks, and eighty per cent. have been able to give exclusive or partial breast feeding during the first five months.

CHARLES HERRMAN, M. D.

Book Reviews.

[We publish full lists of books received, but we acknowledge no obligation to review them all. Nevertheless, so far as space permits, we review those in which we think our readers are likely to be interested.]

Influenza. Its History, Nature, Cause, and Treatment. By ARTHUR F. HOPKIRK, M. D. (Jena). London: The Walter Scott Publishing Co., Ltd.; New York: Charles Scribner's Sons, 1914. Pp. xix-209.

We might have thought that this work was intended for the physician had we not, when first opening it, happened upon a glossary wherein are explained such words as angina, bradycardia, and diaphoresis. Yet the book seems to contain much material not thoroughly understandable by the average lay reader. Perhaps a highly educated chronic sufferer from la grippe would get most out of the book. A history of the disease is given and the diagnostic points are listed, while the commoner remedies are prescribed. For complications, however, the reader is referred to Quain's *Dictionary of Medicine* and to periodical literature of a kind not usually perused by nonmedical students. Some of our brethren will be horrified to note the prescription of champagne, frivolously referred to as "fiz," as the best of all pick-me-ups for the well known postinfluenzal depression. Homeopathic medication is spoken of as "rational," and we are glad to meet our old friend, anti-phlogistic, once more, this time as an alternative to homeopathic, dietetic, climatic, palliative, or stimulating treatment, the patient being apparently invited to take his choice. Having received the admonition, however, to go to bed and to send for a doctor and a nurse, we do not see

the necessity for so much more advice, covering many pages, concerning remedial measures except, perhaps, for the sake of completeness. Altogether the book is a puzzle, even if an interesting one.

A Manual of Medical Treatment, or Clinical Therapeutics. By I. BURNEY YEO, M. D., F. R. C. P., Emeritus Professor of Medicine in King's College, London, Consulting Physician to King's College Hospital, Hon. Fellow of King's College. Fifth Edition, by RAYMOND CRAWFORD, M. A., M. D. Oxon., F. R. C. P., Physician and Lecturer on Clinical Medicine to King's College Hospital, Fellow of King's College, London, etc., and E. FARQUHAR BUZZARD, M. A., M. D. Oxon., F. R. C. P., Physician for Out-Patients to St. Thomas's Hospital and to the National Hospital for the Paralyzed and Epileptic, Queen Square, etc. In Two Volumes, Vol. II. New York: William Wood & Co., 1913. Pp. vii-846. (Price, \$6.)

It is a good omen that books like this continue to find favor. Since there are so many novelties—pseudo and others in therapeutics—it is difficult to preserve an entirely impartial attitude when writing on medicine, but in these volumes the authors strike the happy mean. They take the new and old points, it seems to us, equally well, and the book discloses a happy union of the mind of the writers to the whole matter of their subject. No one could doubt that such would be the character of any publication of Dr. Burney Yeo's. The various novelties relating to the treatment of disease are put in their proper place in a general scheme of practice and become easy to appreciate. Question begging propositions of pharmacologists and immunizers are thus pointed with an aphorism. We should learn to distinguish "a prolonged series of consequences from a prolonged series of mere coincidences." The observation is just. Such are the means by which the authors have endeavored to make a treatise which will enable the physician to obtain a knowledge at once comprehensive and new—a knowledge which will enable him to follow in an intelligent manner the practice of modern clinics, and study cases and use new remedies with readiness and ease. Among excellent chapters we may notice those on pneumonia, Bright's disease, hepatic cirrhosis, and phthisis. We have found few errors, but in the index, under Erysipelas, Volume I, p. 667, should be changed to II, p. 667.

Organic Chemistry. For Students of Medicine. By JAMES WALKER, LL. D., F. R. S., Professor of Chemistry, University of Edinburgh. London: Gurney and Jackson; Edinburgh: Oliver and Boyd, 1913. Pp. xi-328.

The increasing demands of the medical curriculum on the time of the student seem to necessitate a recasting of the instruction wherever that is possible so as to economize in time. Professor Walker has produced an excellent textbook on organic chemistry for students of medicine, and has cut down materially the amount of space ordinarily devoted to this topic by using substances of more or less medical interest to illustrate the various classes and groups of organic compounds. In this way the student will acquire a knowledge of substances of medical interest at the same time that he learns the modern theories of organic chemistry. The plan of the author is admirably carried out. The type forms collected for illustrating the various laws and theories are well chosen and the matter is set forth concisely, but clearly and intelligibly.

Sciatica. A Fresh Study. By WILLIAM BRUCE, M. A., LL. D., M. D. (Aber.). With Notes of Nearly 700 Cases. New York: William Wood & Co., 1913. Pp. x-175. (Price, \$1.75.)

In this interesting little book the author gives his personal experience and close observation with full notes of 691 cases of "that group of associated symptoms known as sciatica," which, he demonstrates, "result from irritation originating from troubles in the hip joint." He gives his reasons for rejecting the common view that it is a neuritis, for which, he declares, there is no pathological evidence. He pleads for more careful, exact studies of cases, and his own observations are thorough and full of practical consideration of the factors, both immediate and remote, mechanistic and anatomic, including radiograms.

Arthritic involvement was found uniformly present, with usually cognate spasm in associated muscles. His method of treatment, which is most successful and thorough in re-

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Original Articles.

For Texas Medical Journal.

Acute Indigestion.*

BY ALF IRBY, M. D., WEATHERFORD, TEXAS.

"Washington, D. C., November 21, 1913. John H. Marble, a member of the Interstate Commerce Commission, died here tonight of acute indigestion, by which he was stricken yesterday in Philadelphia."

In taking this newspaper announcement as the subject for a few remarks, I realize that they will be wholly inadequate and of insufficient merit to deserve the name of "a paper." Nevertheless, however poorly written or however sloven the phraseology may be, it is hoped that they may elicit a discussion.

"He died of acute indigestion." It is reasonable to suppose that he had as a complication or sequellae that convenient and ever present trouble, "heart failure."

In the beginning of this, I want to say that there is no such ailment as independent or idiopathic stomach indigestion in spite of Professor Ewald to the contrary. The nearest approach there is to it is the local or gastric disintegration and decomposition of any albuminous substance taken into the stomach as food, commonly known as ptomaine poisoning, or tyrotoxican poison, coming from the ingestion of poisonous milk, cheese or ice cream. But in either of these, the general system is saturated with toxins peculiar to each before the local symptoms are manifest, for digestion has taken place a priori.

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*Read at meeting of the Hood-Summerville Medical Societies, March 3, 1914.

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ache, nasal irrigations and violent blowing of the nose must be prohibited; (6) enlarged tonsils and all adenoid tissue must be removed.

Abstracts and Selections.

Experimental Implantation of the Generative Glands—Successful Testis Implantation of a Subject Dead Twenty-four Hours—Implantation of an Ovary From a Subject Dead Twenty-three Hours.

BY G. FRANK LYDSTON, M. D., CHICAGO.

Having in mind what has long seemed to me to be the true etiology of dementia precox, the nervous conditions resulting from extensive mutilating operations on the female pelvis, and the possibility of retarding senile changes, prolonging life and increasing efficiency by the administration of the internal secretions of sex-glands in both the male and the female, I have recently made two experiments which seem to me both interesting and of practical

value. I have prepared a paper upon the general subject of the therapeutic possibilities of sex-gland implantation, which I will later present to the profession. My reason for presenting experiments which I have made at this time is simply that I wish to immediately establish priority.

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his remarkable observations and experiments; (3) the possibility or probability of benefit from implantation of sex-glands in dementia precox, its congeners, impotency and sterility, psychopathia sexualis, chronic diseases of the skin, the disturbances incidental to the menopause, arteriosclerosis, the results of sex mutilations, and retarding senility; (4) the question of permanency of result. In this paper also will appear a plea for such legislative action and education of public sentiment as shall enable us to obtain for experimental and therapeutic purposes the material necessary for sex-gland implantation.—*Bulletin Chicago Medical Society*.

PROPHYLAXIS OF INTESTINAL STASIS.—Seton Pringle, the well known Dublin surgeon, is an experienced laparotomist and familiar with the different procedures undertaken to relieve intestinal stasis. All the more weight, therefore, must be given to his advice to prevent the condition, if possible, and to try medicinal agents before employing any of the operative procedures, "legion," as he says, "in number." In the *Dublin Journal of Medical Science* for February, Mr. Pringle impresses upon the profession his belief that the abdominal are the most important voluntary muscles of

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JULY, 1914.

No. 7

Editorial.

The First European Travel Study Tour of American Physicians

(Continued from June issue)

Bad-Nauheim.

On the north slope of the Taunus mountains some twenty-five miles from Frankfort on the Main is the famous watering place of Bad-Nauheim. The thermal springs have been known for centuries as a place for extracting salt. The yield is only about 2,000 tons annually—an amount California could produce in a week. Bad-Nauheim belongs to the grand-duchy of Hesse-Darmstadt. It is a beautiful summer resort and watering place. The large quantity of carbonic acid gas emitted from the springs remind one of some of our splendid California mineral springs such as those at Soda Bay in Lake County. The Nauheim springs vary in temperature from 84° F. to 95° F., and are employed with success in cases of gout and rheumatism. They also make a specialty at Nauheim of baths for heart affections in which the Co^2 accumulates on the skin of the bather and stimulates cutaneous circulation. The baths are pleasant, the people are pleasing and their Kurhaus and hotels are delightful. We were wined and dined and splendidly entertained by the physicians and municipality. The drive to Johannisberg overlooking, as it does, the town and neighborhood of this beautiful country will long be remembered by us all.

Experimental Implantation of the Generative Glands—Successful Testis Implantation of a Subject Dead Twenty-four Hours—Implantation of an Ovary from a Subject Dead Twenty-three Hours.

By

G. FRANK LYDSTON, M. D., Chicago

Having in mind what has long seemed to me to be the true etiology of dementia precox, the nervous conditions resulting from extensive mutilating operations on the female pelvis, and the possibility of retarding senile changes, prolonging life and increasing efficiency by the administration of the internal secretions of sex-glands in both the male and the female, I have recently made two experiments which seem to me both interesting and of practical value. I have prepared a paper upon the general subject of the therapeutic possibilities of sex-gland implantation, which I will later present to the profession. My reason for presenting experiments which I have made at this time is simply that I wish to immediately establish priority.

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The Physician's Alphabetical Curriculum.

A stands for Anatomy, medicine's foundation stone;
 B for Biology, that deals with life alone.
 C for Chemistry, the primary elements of all;
 D for Disease, we must fight at every call.
 E stands for Energy, the physicians true winning card;
 F for Faithfulness, to which all should give regard.
 G stands for Gratitude, that we accept with much delight;
 H stands for Hope, that always helps to win the fight.
 I for Industry, that keeps us well read and up to date;
 J stands for Judgment, to prevent any ill fate.
 K stands for Knowledge, that shines to make every path-
 way clear;
 L stands for Love, and it should make the whole world
 dear.
 M for Materia Medica, tells how to treat;
 N for Nursing, the physicians true anchor sheet.
 O for strict Obedience, demand it in all your work;
 P for Physiology, study and not shirk.
 Q stands for Questions, you must propound in every case.
 R for Riches, that aids us all in life's race.
 S stands for Sincerity, we must never, never lose;
 T for Truthfulness, the course one must always choose.
 U for Usefulness, the noble and true physicians goal;
 V for Visitors, who annoy the patient's soul.
 W for Watchfulness, that makes all the obscure symp-
 toms clear;
 X for Xertion, we must use and never fear.
 Y stands for the Yearning, to always make you do the
 right:
 Z stands for the Zeal, to finally win the fight.

M. M. Smith, M. D., Dallas, Texas.—In
Dallas Medical News.

New York Medical Journal

INCORPORATING THE

Philadelphia Medical Journal ^{and} The Medical News

A Weekly Review of Medicine, Established 1843.

VOL. C, No. 2.

NEW YORK, SATURDAY, JULY 11, 1914.

WHOLE NO. 1858.

Original Communications.

THE TREATMENT OF THE SUMMER DIARRHEAS OF CHILDREN.

By FLOYD M. CRANDALL, M. D.,
New York.

It is the object of this paper to consider the treatment of the condition commonly known as summer diarrhea of children. It is sometimes known as gastroenteritis or mycotic diarrhea. The most appropriate name is that adopted by Holt, acute gastroenteric intoxication. Symptoms and pathology are referred to only as required in explaining the reasons for treatment. It should be clearly understood at the outset that in diarrhea of this type, in the earlier stages at least, we are not dealing with an inflammatory condition, but with an acute intoxication. By intoxication we mean in modern medicine the absorption of poisonous ptomaines from a putrefying source. The bacteria do not enter the blood, but their toxins do. They are active poisons and produce conditions similar to those resulting from repeated alkaloidal injections. The symptoms depend upon the frequency or intensity of the dose injected or absorbed. The germs producing the intoxication in summer diarrheas have their habitat in the intestinal tract. They rarely enter the blood and do not generate there. The disease results from the absorption of the ptomaines alone, and is, therefore, not a septicemia nor an inflammatory condition. In the later stages, inflammation sometimes arises from irritation of the mucous membranes by acrid secretions or poisons. In the earlier stages we have to do simply with an intoxication. This statement cannot be too strongly implanted in the mind of the practitioner, for upon its realization must largely depend successful treatment.

The child with summer diarrhea is suffering from intoxication or arrest of digestion, either one or both. The arrest of digestive secretion very early in the infection is a most important factor. The power of digestion is annulled. By the time the physician makes his first visit, Nature has already taken the case in hand by emptying the stomach and bowels and taking away the appetite for food, which would add fuel to the flames. It is the wise course of the physician to follow the path pointed out to him. Four general measures of treatment, therefore, are indicated: Mechanical, dietetic, hygienic, and medicinal. Although a considerable proportion of space will necessarily be devoted in this

article to other measures, it cannot be too strongly insisted that dietetic treatment is the most important.

At the outset, mechanical measures are usually indicated to clear the digestive tract of fermenting material. Stomach washing is rarely necessary, but should be resorted to should the child continue to vomit curds or food or sour and putrefying matter. Liberal drafts of warm water are usually well taken by the patient and obviate the necessity of the stomach tube. Rectal irrigation by means of a catheter or long tube is usually advisable; warm saline solution or boiled water with borax is to be used. Strong antiseptics are unnecessary and unsafe. Prompt unloading of the lower bowel by means of irrigation is very important. High irrigations are valuable until convalescence is thoroughly established. One thorough irrigation a day is more effective than many rectal injections. In the late stages, when the child has been depleted by large watery stools, it is well to leave as much water as possible in the colon for absorption.

Two facts indicate very clearly the line of dietetic treatment. First, digestion is at a standstill; second, the food, be it ever so perfect, is prone to become infected in the digestive tract and continue the fermentation. The old illustration of fresh milk in a sour bottle, cannot be too frequently repeated. Be the milk or the food ever so fresh and perfect, it will undergo putrefaction when brought into contact with putrefying matter.

The indications for feeding, therefore, are clear. First, keep all food out of the digestive tract as long as possible; second, in resuming the food, select that food capable of the least chemical change and putrefactive action. The changes in the food may be either fermentation of the carbohydrates and hydrocarbons, or putrefaction of the protein elements. Therefore, milk should be positively interdicted in summer diarrhea. It is true that milk is an admirable food for children. It is also true that beefsteak and potatoes are an admirable food for adults, but when the adult is stricken with fever, diarrhea, and vomiting, the beefsteak and potatoes are eliminated from the diet. The reasons for eliminating milk from the diet of the child under similar conditions are equally strong, but do not seem always to be recognized by practitioners.

At the outset of an acute diarrhea, therefore, all food should be prohibited, but water should be given freely, unless it induces vomiting. Even if a part of it is vomited, it is best to give some, for a portion may be retained and aid in preventing depletion of the tissues by excessive watery stools.

meral head and glenoid process, shown by the x ray. These changes have been found frequently and have been variously interpreted. Küstner believed they were due to epiphyseal separations with displacement of the diaphyseal fragment forward or backward. We are practically all agreed now that we are dealing here with dislocations in most cases and that they are practically all posterior. The evidence in one of von Bramann's cases, if I may be permitted to express an opinion, is strongly in favor of a traumatic origin at birth. There was at birth a fracture of the surgical neck of the humerus on the opposite, the right side, and positive evidence of injury on the left side, which was found palsied soon after birth. The humerus was also in marked internal rotation and the forearm pronated. One would infer from the report that von Bramann first found the dislocation on this side when the boy was thirteen years old. Our greatest need now is careful examination, by competent observers, of these shoulders immediately after birth. I believe that we shall soon obtain this, now that attention is being directed to these shoulders.

SUMMARY.

I should summarize briefly my reasons for believing that most obstetrical palsies are of shoulder joint origin, as follows:

1. In all of my cases in which the parents could recall the facts, their testimony was that following birth the children cried violently when the affected shoulder was manipulated.

2. Dr. J. W. McConnell, who has examined most of my cases, did not find abnormal electrical reactions in any. Fairbank, who reported forty cases, found that electrical examinations were not advisable before the end of the second month, when an anesthetic was essential, and that by that time the signs of recovery would render electrical examinations unnecessary. Sherren did not test the electrical reactions until the end of the third month. The exact electrical findings in reported cases are probably very rare. I cannot recall one.

3. All of my cases without subluxation ended in complete recovery, except one with some restriction of abduction and external rotation at the shoulder and an old injury at the elbow, and another about six months old, which is rapidly improving. All my cases in which there seemed to be a permanent palsy, showed posterior subluxation of the shoulder joint.

4. The chief evidence supporting the plexus theory, is that obtained at operation on the plexus, all of which can be explained by the joint lesion, except the actual rupture of the roots found in a few cases which, I believe, need further confirmation.

5. The frequent occurrence of posterior subluxation of the shoulder joint was not taken into account by those most favorable to the plexus theory.

6. The presence of the bent down condition of the acromion, in my opinion, will establish the occurrence of the subluxation at birth and, therefore, the dependence of the palsy upon the joint lesion.

7. Since the roots of the plexus are all mixed motor and sensory nerves, sensation should be frequently and seriously disturbed if the cause is a

rupture of the plexus; yet sensation is rarely disturbed.

8. The Duchenne-Erb type of paralysis is generally agreed to be common to the frequent adult cases and the obstetrical palsies. The plexus lesion and the muscles paralyzed are agreed to be the same in both groups, yet the very frequent posterior subluxation in the obstetrical palsies, accounted for by the effects of the paralysis, never occurs in the adult cases. Why not the same effect from the same paralysis in both groups?

9. It is well known that traumatic dislocations of the shoulder frequently precede the paralysis in the adult cases, yet according to the present day supporters of the plexus theory, the dislocation in the children always follows and is due to the paralysis. Why this important difference? The establishment of a traumatic origin at birth would clear up all the difficulty.

10. Duchenne, who first described obstetrical palsies and ascribed them to injuries of the brachial plexus, found these posterior dislocations frequently associated. He said that many of them were due to the manipulations of the physician during delivery, i. e., they were traumatic in origin and occurred at birth.

In my opinion, the plexus theory is the greatest obstacle to the complete recovery of most of these cases, and if these dislocations were recognized at birth and completely reduced, there would be few permanent obstetrical palsies.

2005 CHESTNUT STREET.

TRANSPLANTATION OF A TESTICLE FROM THE DEAD TO THE LIVING BODY.

Suggestiveness of Results in Their Relation to the Etiology and Treatment of Psoriasis, Carcinoma, Etc. (A Preliminary Report.)

By G. FRANK LYDSTON, M. D.,
Chicago.

Encouraged by certain results of sex gland implantation, a full report of which has for some time been in the hands of the editor of the NEW YORK MEDICAL JOURNAL and will shortly appear, I recently made an additional experiment which led to some very interesting observations. As noted when the paper referred to is published, it arrived at the conclusion from the apparent logical effect of my earlier implantations that obstinate chronic skin diseases, notably were a promising field for the therapeutic treatment of the sex gland hormone via implantation.

The idea suggested itself that perversion, primarily due, perhaps, to an abnormal quality and quantity of internal secretions of sex or other glands—underlay skin lesions of this class in question. The obvious inference was that stimulation by the sex hormone would prove beneficial. Reasoning from the results upon skin nutrition which I had observed following sex gland implantation, I concluded that chronic disease might be benefited by implantation of sex glands. Inasmuch as the sex gland powerfully stimulates the nutrition of the skin,

probably also the action of other internal secretory glands—it would seem logical to infer that a similar action might be expected in other tissues.

In my paper which is shortly to appear I have suggested that arteriosclerosis, chronic renal disease, diabetes, tuberculosis, and even carcinoma, and numerous other conditions involving perverted cell structure and function, may offer a suitable field for the use of sex gland hormone—notably by implantation. The germ theory of the etiology of carcinoma has not seemed to me well grounded. Indeed, I am of opinion that the nearer we come to a perfect knowledge of the internal secretions, the nearer we will be to the true etiology and rational therapeutics of carcinoma. In any event, whatever the abnormal impulse may be, the result is perverted cell growth, and we may at least regard hopefully any remedial measure that promises improvement in cell nutrition.

To put my view of the etiology of malignant disease concretely: I believe that there is more than a chronological coincidence in the association of sarcoma with childhood and youth and of carcinoma with later life. A disturbance of cell nutritive equilibrium from perverted quantity or quality—or both—of internal secretion—probably of the sex gland, the thyroid perhaps playing an important part—in my opinion underlies both varieties of malignant disease. The sex gland hormone theoretically should restore this equilibrium, making in effect the cells of the sarcomata older and stronger and those of the true carcinomata younger and stronger.

In the light of the foregoing view of malignant disease, the theory of Cohnheim is especially apt in its application to malignant disease of early life, and to sarcoma and the softer varieties of carcinoma at any age.

The association of cancer with the approach or occurrence of the menopause, and with advancing age in the male, is suggestive of change in the sex gland hormone as the chief underlying factor. Epithelioma of the skin especially may be compared to psoriasis in that a defect of nutrition due to perversion of internal secretion and localized by special factors of irritation is a reasonable underlying cause.

role of microorganisms in carcinoma may be merely that of a special determining factor in perverted cell growth through the irritated, and no more specific than trauma, which so often appears to be the point of development of malignant disease. Thyroid extract has been found to have cured psoriasis. This is not surprising.

The thyroid and sex gland hormones are complementary. Thyroid defect may be the more important factor in malignancy of early life.

Due to defective quantity and quality of both hormones, perhaps may be cured and may require a combination of both. The needful in thyroid implantation may be the same as in aneasous sex gland implantation. It is my conviction that the administration of sex gland hormone by implantation—with or without thyroid extract—as events may prove—is the logical indication well worthy of trial in malignant disease. Whether beneficial results will follow organo-

therapy, this naturally will be determined by many factors independent of the etiology of the disease.

CASE. Man, aged fifty-three years, musician, consulted me June 10, 1914; hard drinker and a gourmand; no history of syphilis; Wassermann negative; history of two tappings for ascites, six years before. A diagnosis of cirrhosis of the liver was made at that time. When the patient first consulted me, his abdomen was enormously distended with fluid. Jaundice had appeared a few days before and had become quite pronounced. No pain was complained of, nor was there any history of pain previously. The subject was very weak and markedly incommode by the enormous bulk of his abdomen. His appetite had been excellent until a few days before, since when it had failed. June 14th, I removed nearly six gallons of bile stained transudate from the abdominal cavity, affording the patient great relief. The liver was found to be greatly enlarged and hard. The gallbladder was greatly distended and its walls much thickened and hard. In the left iliohypochondriac region was a hard, elongated tumor mass extending downward from the under surface of the liver for about four inches. This tumor might have been renal or even omental. It could not be definitely determined that it was attached to the liver. The tumor seemed probably malignant. There was a good sized umbilical hernia, evidently containing only fluid, which freely flowed back and forth under pressure. This had been unsuccessfully operated upon. The urine contained bile in large amount and a small quantity of albumin, but no casts.

The patient's heart was very weak following the operation and strychnine was given hypodermically for several days. On the backs of the arms and forearms, the front of the right leg, the buttocks, the lumbar region, and the back were large patches of typical psoriasis from which the patient had suffered for many years. A patch of psoriasis of the size of the palm of one's hand existed on the abdomen, involving a small portion of the skin covering the umbilical hernia.

On June 19 I implanted in the patient's right scrotal sac a testicle—with the epididymis excised—removed from an apparently healthy subject about twenty-one years of age, dead thirty hours before from contact with a live wire. The operation was done ten hours after removal of the testis from the dead subject—i. e., forty hours after death. The postoperative course was uneventful. The wound healed by primary union and there was very little swelling about the site of the implantation. The highest temperature recorded was 100° F. Today—the eighth day—the implantation *per se* would seem to be successful.

On the third day after the implantation improvement was noted in the psoriasis. At present writing, the eighth day after operation, the lesions are so improved that they scarcely can be recognized as psoriasis. The skin over one elbow is nearly normal. The patches upon the back have entirely disappeared. The jaundice has improved, the blood pressure—which was low on account of the patient's debilitated condition—has increased, the pulse is perceptibly stronger, appetite has greatly increased, the hemoglobin, which was approximately sixty per cent., is now seventy per cent., and there is a distinct improvement in color, aside from the lessening of the jaundice. A considerable reaccumulation of fluid has occurred and a second tapping probably will become necessary.

I submit without further comment this brief preliminary report of the foregoing results of the primary or initial dose of sex hormone. What I have to say of sex gland hormone therapy in general will, I hope, shortly appear in this JOURNAL.

32 NORTH STATE STREET.